

A NEW SPECIES OF ACHYROCLINE (INULEAE-ASTERACEAE) FROM PERU

Michael O. Dillon
Department of Botany
Field Museum of Natural History
Chicago, IL 60605-2496

and

Abundio Sagástegui-Alva
Herbarium Truxillense (HUT)
Universidad Nacional de Trujillo, Peru

ABSTRACT - A new species of Achyrocline (Inuleae-Asteraceae) is described for northern Peru: Achyrocline peruviana Dillon & Sagást.; and an illustration and a key to the Peruvian species are provided.

Achyrocline is a genus of 15-20 species distributed primarily in tropical and subtropical South America, with a few in tropical Africa, Madagascar, and Comores, and one represented in Central America. This genus most closely resembles Gnaphalium in habit and floral structure; however, Achyrocline is readily distinguished by its cylindrical to narrowly campanulate involucre and few number of total florets (< 25). In Peru, some four species occur in a wide variety of habitats and elevations throughout the Andean Cordillera.

In preparation for an upcoming treatment of the Inuleae (Asteraceae) for the Flora of Peru the following species description is made.

Achyrocline peruviana Dillon & Sagást., sp. nov. Fig. 1.

Foliis angusto lanceolatis vel ellipticis, plerumque 4-5 cm longis, 2-8 mm latis, apice acutis, mucronatis a simili Achyrocline celosioides (Kunth in H.B.K.) DC. differt. Habitat in vallibus occidentalibus andinis siccis.

TYPUS: Peru, Cajamarca, Contumazá, El Granero, ladera abierta, 14 Jun 1983, 2800 m, A. Sagástegui A. & S. López M. 10661 (HUT, holotypus; F, MO, isotypí).

Suffrutescent perennials to 0.75 m tall, much-branched basally; stems arachnoid-tomentose. Leaves alternate, sessile, the blades narrowly lanceolate to elliptic, (1.5-) 4-5 cm long, 2-

8 mm wide, discolorous, basally attenuate, apically acute, mucronate, lower surface densely arachnoid-tomentose, upper surface sparsely arachnoid-tomentose, glabrescent, obscurely trinervate, the margins entire. Capitulescences glomerulate, cymose-paniculate, open, terminal and axillary. Capitula disciform, ca. 4 mm high, ca. 1.2 mm wide, sessile; involucre narrowly campanulate, stramineous; phyllaries 9-10, 2-3-seriate, subequal, glabrous, the outer phyllaries lanceolate, 2-3 mm long, ca. 1 mm wide, apically acute, the inner phyllaries lanceolate, 3-4 mm long, ca. 1.2 mm wide, apically acute; pistillate florets 1-2, the corollas filiform, ca. 2 mm long, apically ca. 4-cleft, the lobes densely glandular with multicellular trichomes, the style branches slender, apically truncate, penicillate; hermaphroditic florets 2-3, fertile, the corollas tubular, ca. 2.5 mm long, apically 5-lobed, the lobes densely glandular with multicellular trichomes, the style branches oblong, apically truncate, penicillate. Achenes ovoid, ca. 1 mm long, glabrous, brown; pappus bristles ca. 2.5 mm long, uniseriate, strigulose, free and falling separately.

DISTRIBUTION: Achyrocline peruviana is apparently a narrow endemic presently known only from dry intermontane localities in the Departments of Cajamarca and La Libertad (2600-3100 m.). Its distribution is primarily restricted to river valley systems with Pacific drainage.

Achyrocline peruviana is most closely related to A. celosioides, but differs from that species by possessing more narrowly elliptic or lanceolate leaves usually at least 4 cm long with acute, mucronate apices. The distribution of A. celosioides is primarily restricted to moist sites in river valleys with eastern (Atlantic) drainage from southern Ecuador to central Peru.

Some individuals of A. satureioides approach A. peruviana in general appearance, but the former species has narrowly cylindrical capitula and a distribution at lower elevations (below 1500 m) on the eastern escarpment of the Andean Cordillera.

Additional material examined: PERU. Dept. Cajamarca. Prov. Contumazá: 1-2 km S of Contumazá, 2620 m, Dillon, Sagástegui, & Dillon 4455 (F, HUT, MO, TEX, US, USM); Contumazá, 2600 m, Sagástegui et al. 10685 (F, HUT, MO). Dept. La Libertad. Prov. Huamachuco: Hda. Cochabamba, 2750 m, López & Sagástegui 2781 (HUT); Prov. Otuzco: Agallpampa, 3100 m, López 1867 (F, HUT), 895 (US).

Key to Peruvian Species of Achyrocline

1. Leaves decurrent; stems winged..... A. alata
1. Leaves not decurrent; stems unwinged.....2
 2. Leaves linear to linear-lanceolate; capitula tightly cylindrical, outer phyllaries ovate, apically obtuse or rounded3
 3. Plants with reduced habits, usually < 50 cm tall; leaves 2-3(-5) cm long, 1-3 mm wide..... A. ramosissima
 3. Plants not reduced in habit, usually > 1 m tall; leaves 4-10 cm long, 2-9 mm wide..... A. satureioides
2. Leaves lanceolate to elliptic or obovate; capitula narrowly campanulate, spreading; outer phyllaries lanceolate, apically acute.....4
 4. Leaves elliptic to obovate, (0.5-) 1.3-3.5 cm long, 5-16 mm wide..... A. celosioides
 4. Leaves lanceolate to elliptic, 1.5-5 cm long, 2-8 mm wide..... A. peruviana

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EXPLANATION OF FIGURE

Fig. 1. Achyrocline peruviana. A, habit; B, capitulum; C, outer phyllary; D, inner phyllary; E, hermaphroditic floret; F, pistillate floret; G, stamen; H, style branches of hermaphroditic floret. (Drawn from Sagástegui & López 10661, HUT).

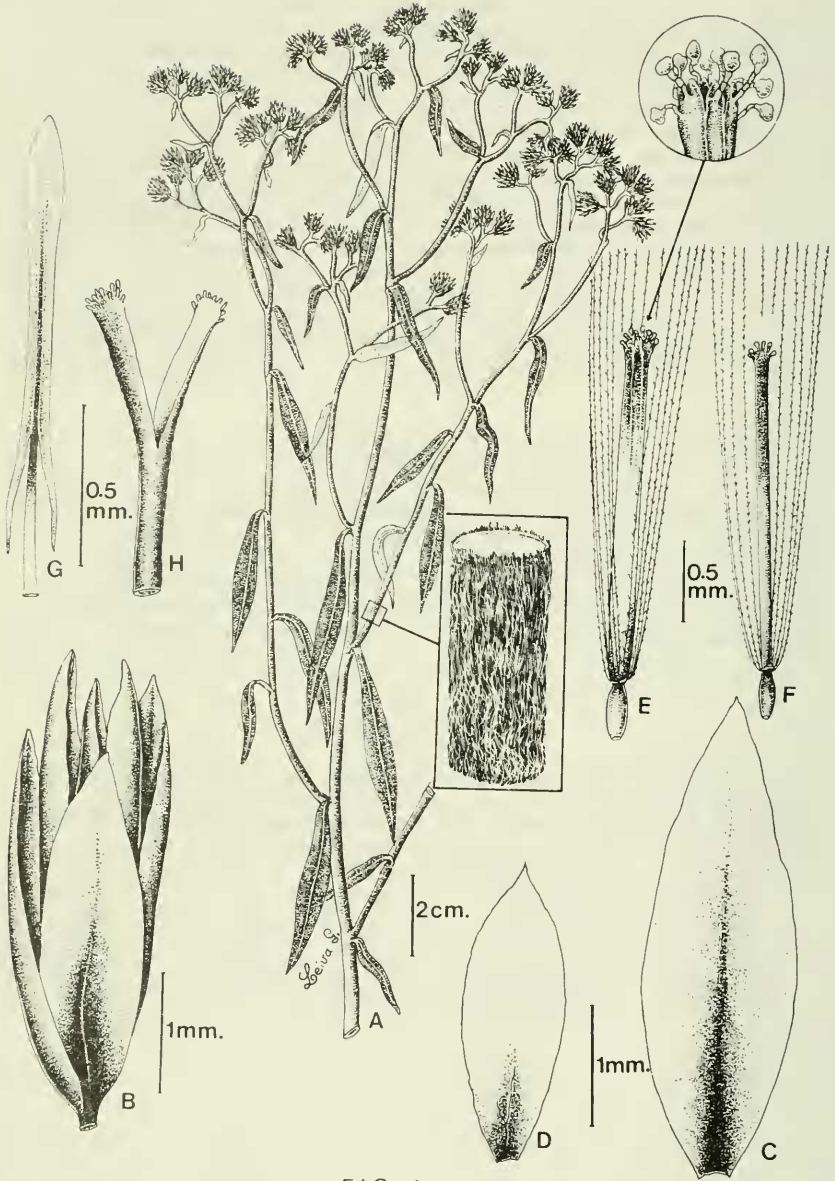


FIG. 1.